

Habitability in the Solar System and on extrasolar planets and moons.

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The criteria for a habitable world initially was based on Earth and centered around liquid water on the surface, warmed by a Sun-like star. The moons of the outer Solar System, principally Europa and Enceladus, have demonstrated that liquid water can exist below the surface warmed by tidal forces from a giant planet. Titan demonstrates that surface liquids other than water - liquid methane/ethane - may be common on other worlds. Considering the numerous extrasolar planets so far discovered and the prospect of discovering extrasolar moons it is timely to reconsider the possibilities for habitability in the Solar System and on extrasolar planets and moons and enumerate the attributes and search methods for detecting habitable worlds and evidence of life.